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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,049	03/31/2004	Yew Wee Cheong	111079-136357	5732
31817	7590	10/05/2006	EXAMINER	
SCHWABE, WILLIAMSON & WYATT PACWEST CENTER, SUITE 1900 1211 S.W. FIFTH AVE. PORTLAND, OR 97204			SHAKERI, HADI	
			ART UNIT	PAPER NUMBER
			3723	

DATE MAILED: 10/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/814,049

Applicant(s)

CHEONG, YEW WEE

Examiner

Hadi Shakeri

Art Unit

3723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 August 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-20 and 22-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-20 and 22-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 03, 2006 has been entered.

### ***Claim Objections***

2. Claims 2, 4, 5 and 9 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

Claim 2 recites for "wherein said allowing the adhesive gel...failing to further limit the invention. Parent claim 1, recites for a step of a) providing an adhesive gel...b) applying the gel to first side...c) positioning the wafer onto a platform, and d) grinding the other side of the wafer. The narrative language of "allowing the adhesive gel to release the wafer" does not constitute a positive step (even peeling off a tape would read over the recitation) it is only descriptive (unlike claim 5 or 12). Claim 2, instead of adding another step or limitation to the parent, only further describes in a narrative form a function of the gel, i.e., allowing it to hold the wafer. Same rejection applies to claim 4, which is only narrative in form.

Claims 5 and 12 are objected for being identical, because of reciting the same subject matter.

Appropriate correction is required.

Art Unit: 3723

**Claim Rejections - 35 USC § 103**

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

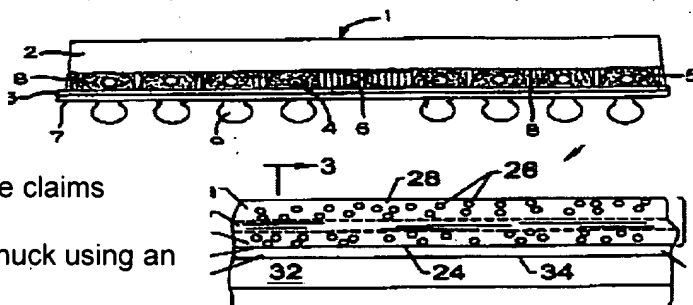
4. Claims 1-6, 8-20, 22, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of either Watson (6,784,555) or Kuhl et al. (6,056,846).

AAPA, e.g., Figs. 1-3 and pages

2-4, meets all of the limitations of the above claims

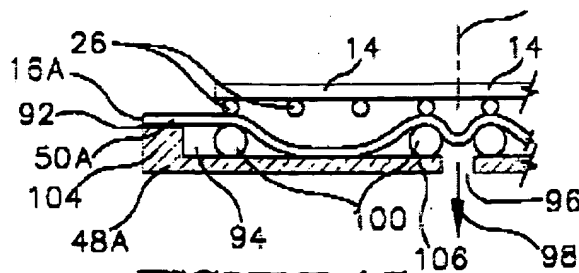
including attaching a semiconductor to a chuck using an adhesive and grinding the backside, except for

disclosing the use of adhesive gel comprising particles. Adhesive used in the art have particles embedded in them for various reasons, e.g., strength, providing uniform gap or spacers. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the invention of AAPA with the use adhesive as taught by either Watson or Kuhl et al. to enhance the operation, e.g., by using uniform spacers preventing localized stress.



5. Claims 1-6, 8-20, 22, and 24-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Farnworth et al. (6,136,137) and Watson.

AAPA, e.g., Figs. 1-3 and pages 2-4, meets all of the limitations of the above claims, except for



Art Unit: 3723

disclosing the use of adhesive gel. Farnworth et al. teaches system and methods for dicing wafers in which pressure sensitive adhesive tapes, or silicone gels (04:44) are used. Watson discloses (columns 1 and 2) adhesives having spacers or fillers to provide a uniform gap. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to modify the invention of AAPA with the use of silicone gel with spacers as taught by Farnworth and Watson to adapt the system for providing adhesion that permits ease of separation (04:41-43).

6. Claims 7 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Prior Art (AAPA as modified by Watson or Kuhl or AAPA as modified by Farnworth and Watson) as applied to claims 1 and 16 above, and further in view of Kataoka et al. (6,273,791).

Prior art as applied above meets all of the limitations, except for disclosing washing the wafer. Kataoka et al. discloses that typically in the producing IC semiconductors, wafers go through a step of washing. It would have been obvious to one of ordinary skill in the art, at the time the invention was made, to further modify the prior art invention with the step of washing to preparer the wafer for the next stage of production in view of Kataoka et al.

### ***Response to Arguments***

7. Applicant's arguments filed August 08, 2006 have been fully considered but they are moot in view of the new rejections.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hadi Shakeri whose telephone number is (571) 272-4495. The examiner can normally be reached on Monday-Friday.

Art Unit: 3723

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'Hadi Shakeri', is written over a printed name and title.

Hadi Shakeri  
Primary Examiner  
Art Unit 3723

September 30, 2006